

REMARKS

Claims 1-3, 5-22, 25-26, 29-30, and 33-34 are pending, with claims 1, 11, 13, and 19-20 being independent.

Submitted herewith is an Information Disclosure Statement, consideration of which is respectfully requested.

In the Office Action of May 24, 2002, claims 1-7, 10, 13-14, 17-18, 20, 22-24, 27-28, and 31-32 were rejected under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima et al. (Gunjima) (U.S. Patent No. 5,587,816).

Also, claims 8, 15, and 21 were rejected under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima and Yuuki et al. (Yuuki) (U.S. Patent No. 6,147,725).

Also, claims 9 and 16 were rejected under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima and Wortman et al. (Wortman) (U.S. Patent No. 6,101,032).

The rejection of claims 4, 23-24, 27-28, and 31-32 has been rendered moot by the cancellation of claims 4, 23-24, 27-28, and 31-32 in the amendment of October 24, 2002.

Arguments traversing the rejections of claims 1-3, 5-10, 13-18, and 20-22 insofar as the rejections may be deemed to be applicable to claims 1-3, 5-10, 13-18, and 20-22 in their present form, i.e. as amended by the amendment of October 24, 2002, were presented in the amendment of October 24, 2002, it being noted that in the amendment of October 24, 2002, the

features of cancelled claims 23-24, 27-28, and 31-32 were incorporated into independent claims 1, 13, and 20 from which cancelled claims 23-24, 27-28, and 31-32 depended. Additional arguments traversing the rejections of claims 1-3, 5-10, 13-18, and 20-22 are presented below.

Independent claims 1, 13, and 20 now recite, inter alia, a light control element arranged at a projected light side of the illumination device and a reflective polarizer arranged at an upper portion of the light control element so that a polarized light transmission axis of the reflective polarizer is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of the light control element, wherein the light control element is the only light control element arranged between the illumination device and the reflective polarizer.

As pointed out in the amendment of October 24, 2002, it is submitted that the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest the combination of a light control element arranged at a projected light side of the illumination device and a reflective polarizer arranged at an upper portion of the light control element so that a polarized light transmission axis of the reflective polarizer is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of the light control element, wherein the light control element is the only light control element arranged between the illumination device and the reflective polarizer, as now recited in independent claims 1, 13, and 20.

The most relevant of the Examiner's comments in the Office Action of May 24, 2002, with respect to claims 1, 13, and 20 in their present form appear to the Examiner's comments with respect to claims 24, 28, and 32 (now cancelled) at the bottom of page 8 of the Office Action of May 24, 2002, which read as follows:

Claims 24, 28 and 32, Applicant admitted prior art discloses (Fig.35) that the light control element (40) is the only light control element arranged between the illumination device (51,53,54) and the reflective polarizer (30).

However, in "Applicant admitted prior art" Fig. 35, although light control element 40 is the only light control element arranged between illumination device 51, 53, 54 and reflective polarizer 30 as recited in claims 1, 13, and 20, a polarized light transmission axis of reflective polarizer 30 is adjusted so as to be substantially at a 45° angle to a control axis of light control element 40, rather than so as to be substantially perpendicular or substantially parallel to a control axis of light control element 40 as recited in claims 1, 13, and 20.

Furthermore, in "Applicant admitted prior art" Fig. 36, although a polarized light transmission axis of reflective polarizer 30 is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of light control elements 40 and 42 as recited in claims 1, 13, and 20, there are two light control elements 40 and 42 arranged between illumination device 51, 53, 54 and reflective polarizer 30, rather than only one light control element as would be required to provide the feature of claims 1, 13, and 20 wherein the

light control element is the only light control element arranged between the illumination device and the reflective polarizer.

Nor is it seen where the features of claims 1, 13, and 20 discussed above are disclosed or suggested by Gunjima, Yuuki, and Wortman.

Accordingly, for the reasons discussed above, it is submitted that "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest the combination of a light control element arranged at a projected light side of the illumination device and a reflective polarizer arranged at an upper portion of the light control element so that a polarized light transmission axis of the reflective polarizer is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of the light control element, wherein the light control element is the only light control element arranged between the illumination device and the reflective polarizer, as now recited in independent claims 1, 13, and 20.

Furthermore, it is submitted that "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest

the feature of claim 2 wherein the reflective polarizer is arranged so that the polarized light transmission axis of the reflective polarizer is approximately parallel to a major axis direction of a pixel of the liquid crystal display element;
or

the features of claim 3 wherein the reflective polarizer is composed so as to have a light directivity in a minor axis direction of the pixel, and wherein the

screen is composed so as to broaden projected light in the minor axis direction of the pixel; or

the feature of claim 13 wherein a major axis direction of a pixel of the liquid crystal display element is arranged approximately parallel to a direction in which a linearly polarized light component of projected light projected from the illumination device is high; or

the feature of claim 20 wherein a major axis direction of a pixel of the liquid crystal display element is arranged approximately parallel to a direction in which a linearly polarized light component of the polarized light projected from the illumination device is high; or

the feature of claim 25 wherein a ratio of a length of the pixel in the major axis direction to a length of the pixel in the minor axis direction is substantially 3:1; or

the features of claim 26 wherein the declined planes form stripes on the reflector, and wherein the stripes on the reflector are substantially parallel to a major axis direction of a pixel of the liquid crystal display element; or

the feature of claim 29 wherein a ratio of a length of the pixel in the major axis direction to a length of the pixel in a minor axis direction of the pixel is substantially 3:1; or

the features of claim 30 wherein the declined planes form stripes on the reflector, and wherein the stripes on the reflector are substantially parallel to the major axis direction of the pixel; or

the feature of claim 33 wherein a ratio of a length of the pixel in the major axis direction to a length of the pixel in a minor axis direction of the pixel is substantially 3:1; or

the features of claim 34 wherein the reflector includes numerous declined reflective planes forming stripes on the reflector, and wherein the stripes on the reflector are substantially parallel to the major axis direction of the pixel.

Since "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest the features of claims 1-3, 13, 20, 25-26, 29-30, and 33-34 discussed above, it is submitted that claims 1-3, 13, 20, 25-26, 29-30, and 33-34 and claims 5-10, 14-18, and 21-22 depending from claims 1, 13, and 20 patentably distinguish over "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman in the sense of 35 USC 103(a), and it is respectfully requested that the rejections of claims 1-3, 5-10, 13-18, and 20-22 under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman be withdrawn.

Although dependent claims 2-3, 5-10, 14-18, and 21-22 are considered to be allowable by virtue of their dependency from allowable claims 1, 13, and 20, it is noted that these dependent claims also recite further features of the present invention which are not seen to be disclosed or suggested by the prior art.

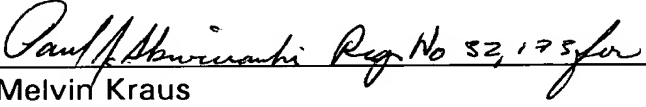
As recognized by the Examiner, the other reference cited but not relied upon neither discloses nor suggests the present invention, and thus no further discussion of this other reference is deemed necessary at this time.

For the reasons set forth above and in the amendment of October 24, 2002, it is submitted that all of the Examiner's objections and rejections have been overcome, and that the application is now in condition for allowance. Reconsideration of the application and an action of a favorable nature are respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (503.36984X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP


Melvin Kraus
Registration No. 22,466

MK/RSS
(703) 312-6600

features of cancelled claims 23-24, 27-28, and 31-32 were incorporated into independent claims 1, 13, and 20 from which cancelled claims 23-24, 27-28, and 31-32 depended. Additional arguments traversing the rejections of claims 1-3, 5-10, 13-18, and 20-22 are presented below.

Supplement
response
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Independent claims 1, 13, and 20 now recite, inter alia, a light control element arranged at a projected light side of the illumination device and a reflective polarizer arranged at an upper portion of the light control element so that a polarized light transmission axis of the reflective polarizer is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of the light control element, wherein the light control element is the only light control element arranged between the illumination device and the reflective polarizer.

Claim
1, 13, 20

As pointed out in the amendment of October 24, 2002, it is submitted that the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest the combination of a light control element arranged at a projected light side of the illumination device and a reflective polarizer arranged at an upper portion of the light control element so that a polarized light transmission axis of the reflective polarizer is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of the light control element, wherein the light control element is the only light control element arranged between the illumination device and the reflective polarizer, as now recited in independent claims 1, 13, and 20.

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The most relevant of the Examiner's comments in the Office Action of May 24, 2002, with respect to claims 1, 13, and 20 in their present form appear to the Examiner's comments with respect to claims 24, 28, and 32 (now cancelled) at the bottom of page 8 of the Office Action of May 24, 2002, which read as follows:

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Furthermore, in "Applicant admitted prior art" Fig. 36, although a polarized light transmission axis of reflective polarizer 30 is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of light control elements 40 and 42 as recited in claims 1, 13, and 20, there are two light control elements 40 and 42 arranged between illumination device 51, 53, 54 and reflective polarizer 30 rather than only one light control element as would be required to provide the feature of claims 1, 13, and 20 wherein the

light control element is the only light control element arranged between the illumination device and the reflective polarizer.

Nor is it seen where the features of claims 1, 13, and 20 discussed above are disclosed or suggested by Gunjima, Yuuki, and Wortman.

Accordingly, for the reasons discussed above, it is submitted that "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest the combination of a light control element arranged at a projected light side of the illumination device and a reflective polarizer arranged at an upper portion of the light control element so that a polarized light transmission axis of the reflective polarizer is adjusted so as to be substantially perpendicular or substantially parallel to a control axis of the light control element, wherein the light control element is the only light control element arranged between the illumination device and the reflective polarizer, as now recited in independent claims 1, 13, and 20.

Furthermore, it is submitted that "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest

the feature of claim 2 wherein the reflective polarizer is arranged so that the polarized light transmission axis of the reflective polarizer is approximately parallel to a major axis direction of a pixel of the liquid crystal display element;
or

the features of claim 3 wherein the reflective polarizer is composed so as to have a light directivity in a minor axis direction of the pixel, and wherein the

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screen is composed so as to broaden projected light in the minor axis direction of the pixel; or

the feature of claim 13 wherein a major axis direction of a pixel of the liquid crystal display element is arranged approximately parallel to a direction in which a linearly polarized light component of projected light projected from the illumination device is high; or

the feature of claim 20 wherein a major axis direction of a pixel of the liquid crystal display element is arranged approximately parallel to a direction in which a linearly polarized light component of the polarized light projected from the illumination device is high; or

the feature of claim 25 wherein a ratio of a length of the pixel in the major axis direction to a length of the pixel in the minor axis direction is substantially 3:1; or

the features of claim 26 wherein the declined planes form stripes on the reflector, and wherein the stripes on the reflector are substantially parallel to a major axis direction of a pixel of the liquid crystal display element; or

the feature of claim 29 wherein a ratio of a length of the pixel in the major axis direction to a length of the pixel in a minor axis direction of the pixel is substantially 3:1; or

the features of claim 30 wherein the declined planes form stripes on the reflector, and wherein the stripes on the reflector are substantially parallel to the major axis direction of the pixel; or

the feature of claim 33 wherein a ratio of a length of the pixel in the major axis direction to a length of the pixel in a minor axis direction of the pixel is substantially 3:1; or

the features of claim 34 wherein the reflector includes numerous declined reflective planes forming stripes on the reflector, and wherein the stripes on the reflector are substantially parallel to the major axis direction of the pixel.

Since "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman do not disclose or suggest the features of claims 1-3, 13, 20, 25-26, 29-30, and 33-34 discussed above, it is submitted that claims 1-3, 13, 20, 25-26, 29-30, and 33-34 and claims 5-10, 14-18, and 21-22 depending from claims 1, 13, and 20 patentably distinguish over "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman in the sense of 35 USC 103(a), and it is respectfully requested that the rejections of claims 1-3, 5-10, 13-18, and 20-22 under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art", Gunjima, Yuuki, and Wortman be withdrawn.

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